overlapping of flat surfaces), is not liable to the misfortunes to which the tillets were so constantly exposed.

Its cost is comparative, as much depends on locality, but in most cases a saving to the extent of two-fifths may be effected on plain tiling, and one-fourth on ordinary slating. As these tiles may be manufactured where the transit of slates would be heavy, a greater proportion of saving would result; and then as to the style, these tiles may be varied to suit any description of building, whether ornamental, modern, or antique, whether it regards colour or design. The accompanying sketch shews tiles in the form of the wood ivy leaf, and the oak.

A. Reed.

Hamworthy Tile Yard, Poole, Dorset.

FACILITIES AND DIFFICULTIES OF VENTILATION.

Some have denied the necessity of making provision for change of air, thinking, that the general laws of nature preclude the idea of inconvenience or ill-effects upon the general health; and, perhaps, this is in part true, or mortality must else have been greater.

Chemistry shews that the general laws of nature may be interrupted; and the discovery leads to the detection of subordinate laws. Animal life cannot exist without oxygen; combustion also requires the same principle. The products of the lungs by respiration have taken away life; the products of combustion extinguish flame. Animal life, and it may be called chemical life, are thus supported and terminated by the same laws.

Liebig says, animal life is a kind of combustion; and many must have felt the general effects of an unusual exposure to fresh air; and those unaccustomed to travelling, are surprised at the influence of fresh air in producing fatigue, being sensible that bodily exertion could not have been the cause. The effects upon the system are usually increased appetite and improved general health.

In a crowded and highly illuminated apartment, we have, from two sources, an enemy to animal life; the products of what has been called animal, and that of common combustion. These principles, when present in any considerable degree, weaken the powers of nature, by removing or modifying the general laws which preserve health.

Ordinary apartments are generally healthy, under ordinary circumstances. It is only when there are a number of persons present, that more air is consumed and spoilt by respiration, and other causes, than can be renewed by the usual architectural arrangements.

If the draft of chimnies were increased, where such inconveniences were likely to arise, a ventilating power would be found equal to the difficulty. To increase the draft of a chimney, it is not sufficient to remove all possible obstructions to the ascent of rarified air, but also to make arrangements for a proper supply of common air to replace the loss. If a chimney be supplied freely with air, it will transmit a much greater volume than if the supply be niggardly, or, as it is under ordinary circumstances, strangled. Chimney draft has, then, a scale of power, from the free supply, to that point when the supply is nil, and the unascensive products extinguish flame.

The united draft of a number of chimnies, with combustion going on, is considerable: making arrangements for a supply of air to one or more separately is not sufficient; for correctness and satisfaction all should be supplied from one source.

As most buildings have a greater or less space unoccupied, except as halls and staircases, these should be the reservoir from which the respective apartments may be supplied. The advantages of internal over external ventilation will be apparent, when it is considered, that in the one, should the atmosphere be wet and raw, an opportunity offers itself, by the well-warmed halls and staircases, to correct this objectionable state, while by the other this is impracticable.

It is unnecessary to observe, that the whole interior of a house should communicate by air passages of some sort or other, and that it should not be the endeavour, unwittingly 'tis true, to convert one or more, or all rooms, into what might be called exhausted receivers.

But while dwelling-houses offer every facility for change of air, by the better arrangements for combustion, the same cannot be said to be the case with some buildings of greater magnitude. Churches and chapels are mostly without chimnies, and when they do not possess towers or steeples, the which to contain a ventilating tube of convenient large diameter, the difficulty is considerable. Opening the windows on both sides the building, may assist to cool the heated atmosphere; but if there be no wind, or artificial or mechanical means, to produce an agitation of the impure contents, there will be little or no change. It is too much to expect that hot air which ascends with considerable velocity, should pass off laterally at the same time, or at all. As hot air ascends in straight lines, the ascent is accelerated by passing through tubes of equal diameter.

A building not possessed of a tower or steeple, may still be ventilated by placing in the angles of the building, tubes of conveniently large diameter, which should have their commencement a little above the highest breathing point, and terminate through the roof. Niches and canopies offer an ornamental commencement to the tubes.

Should a chandelier be placed under the opening of the tube, the acceleration of change will be in proportion to the amount of combustion. To double the velocity of the escape, will be to square the motive power. C. F.

Chelsea.

NEW CHURCHES IN THE COUNTRY.

There appear, on a general calculation, to be nearly 400 churches at the present moment in one stage or other of progress throughout the country; that is, either in actual course of erection, conditionally ordered, or priestly in preparation.——Amongst the notices of those to be added in our weekly incidental lists, taken from the local papers, it is strange how few there are in which even the most insignificant and accidental mention is made of the name of that anomalous and superfluous adjunct, the architect, to whom all parties interested were *only* indebted for the idea, the design, the head-work of the whole of that construction, of the foundation or completion and possession of which, in most cases, they are in these notices in the very act of publicly glorying and boasting, while detailing in the fullness of their gratitude to all concerned, even the most paltry contribution of pulpit cushions, linen drapery, kneeling hassocks, and other laudable enough endeavours of those "into whose 'hearts' it has been put, to 'beautify the House of the Lord;'" that house for the very idea, and architectural beauty, and elegance, of which, as it may be, they appear to be, after all, so thankless. This is a "great fact" of a very singular and unaccountable description, which well merits a niche amongst the "curiosities of journalism."——On the 20th ult. the chapel of St. John, the Evangelist, at Stoke-row, parish of Ipsden, near Wallingford, was consecrated by the Lord Bishop of Oxford.——In the hamlet of Seer-Green, parish of Farnham-Royal, Bucks, the new church erected from designs by Mr. James Deacon, has also been consecrated by the Bishop of Oxford, in presence of a numerous assemblage of clergy and others. It is in the early English style of architecture, and consists of a nave, chancel, porch, and vestry, and a stone bell turret at the west end. Including chancel, it is 80 feet long, width 26 feet, turret 60 feet high. The interior is fitted with open benches to the entire exclusion of closed pews, and will accommodate upwards of 200 persons.——Christ Church, West Fordington, has also been consecrated.——The foundation-stone of the new church of All Saints, Leeds, is about to be laid on a site near the York-road, at Pontefract-lane.——The new church at Durweston, Blandford, rebuilt by Lord Portman, and opened on the 25th ult., is an edifice consisting of a spacious chancel and nave, with a south aisle, in the early English style. The chancel arch and timber roof are highly spoken of. The architect was Mr. P. C. Hardwick, of Russell-square; the builder, Mr. Webster, the superintendent of buildings to Lord Portman. The architect designed the pulpit, which has been massively executed in old carved oak.——"On Monday" (week), says a contemporary, "the foundation stone of a new church, to be called St. James's, was laid by the Lord Bishop of Woodside, Horsforth."——The Independent Chapel at Rawden, the foundation-stone of which was laid in March last, is now nearly completed. The chapel, vestries, class-rooms, school-rooms, and manse are all in the Norman Gothic style.——The work of restoration at the parish church of Bridlington is progressing. A new roof over a portion, comprising nearly one-third of the whole length, is now drawing toward completion, after a design by Messrs. Sharpe and Paley, of Lancaster. Mr. Thomas Hodgson, of Bridlington, is contractor for the wood work. The present building is only part of the ancient fabric, including no more than the original nave. The length of the present interior is 185 feet; when entire, the length extended to about 337 feet, being 152 feet more to the eastward than its present limits. The breadth of the interior, including the side aisles, is 68 feet, and the height of the walls 67 feet. From the dimensions here given, the reader will see that though much reduced in size, it is still a spacious edifice. Indeed, from the circumstances of its magnitude, and there being no funds appropriated, either at the dissolution of the monastery or subsequently, for its repairs, there is no wonder that it has been disfigured and dilapidated through the scanty means afforded for repairs. Many of the clerestory windows on both the north and south sides are walled up between the tracery, as is also the case with all the upper compartments of the large west window.——Stert church having been almost wholly rebuilt, was re-opened by the Lord Bishop of Salisbury, on Friday week.——St. Martin's Church, Zeals Green, Wilts, the first stone of which was laid rather more than twelve months since, was also consecrated on Wednesday week by the same bishop.——The new church opposite the railway station at Heaton Norris was consecrated by the Bishop of Chester on Wednesday fortnight. The first stone was laid on 29th July, 1844, by Mr. Wilbraham Egerton, of Tatton Park, who gave the land, endowed the church with 1,000*l.*, and contributed 200*l.* to the cost of the spire.——The foundation-stone of a new church, to be built at the expense of the Rev. Davis Griffiths, vicar of Ystrad, has been laid at Crihyn, Cardiganshire.——The old church at Flint (St. Mary's), is about to be pulled down to give place to "an elegant and capacious edifice." This church is one of very early date, being supposed to be Capella de Colsal, belonging to the Abbey of Basingwerk, mentioned in the charter of David ap Llewellyn.

DECORATIVE ART SOCIETY.

Oct. 28th; Mr. Fildes, V.P., in the chair. He congratulated a numerous meeting on the auspicious commencement of a fourth session, and observed, that the number of persons who were that evening proposed for election as members and subscribers, conveyed an assurance that the past efforts of the society were now receiving a response that would soon place it prominently amidst useful institutions. The objects of the society were described as assuming a definite and practical basis; the recently commenced library, in connection with the society, was also adverted to, as being intended to consist of all works *illustrative of the arts and sciences*, thus offering to the members a treasure which no other institution at present did at a moderate charge; and he trusted that donations to the library would rapidly facilitate the benefits derivable therefrom.

A paper was subsequently read by Mr. Crabb "On the application of colours to manufactures," illustrated by many rich specimens of silk fabrics. The writer noticed the singularly varied opinions prevailing upon the ordinary properties of colours, and asserted that our manufacturers generally gave but little attention to the subject, nor even to the Government School of Design, which might be made capable of administering fully to their wants, provided these were clearly understood by a competent council, at the head of a proper and efficient school of design. In referring to some brocaded silks of the 15th century, he considered that they might be regarded as displaying some of the finest efforts of combined artistical skill and mechanical ingenuity; supporting the leading character of the design, preserving the style in its integrity, with details, promoting a rich and superb effect. This union of various